

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number  
**WO 2004/110422 A1**

(51) International Patent Classification<sup>7</sup>: **A61K 31/155, 9/20, 9/00, 9/16, A61P 3/08**

(21) International Application Number: **PCT/IB2004/050901**

(22) International Filing Date: **14 June 2004 (14.06.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
805/DEL/2003 16 June 2003 (16.06.2003) IN

(71) Applicant (for all designated States except US): **RANBAXY LABORATORIES LIMITED [IN/IN]; 19, Nehru Place, New Delhi, Delhi 110019 (IN).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHAWLA, Manish [IN/IN]; 106, Lal Jyoti Apartments, Sector - 9, Plot - 16, Rohini, Delhi 110085 (IN). RAGHUVANSHI, Rajeev, Singh [IN/IN]; D-8/8131, Vasant Kunj, New Delhi, Delhi 110070 (IN). RAMPAL, Ashok [IN/IN]; 14, Sewa Nagar, Ram Tirath Road, Amritsar, Punjab 143001 (IN).**

(74) Common Representative: **RANBAXY LABORATORIES LIMITED; c/o DESHMUKH, Jay, R., 600 College Road East, Suite 2100, Princeton, NJ 08540 (US).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/110422 A1

(54) Title: EXTENDED-RELEASE TABLETS OF METFORMIN

(57) Abstract: The present invention relates to extended-release unit dosage formulations of metformin or its pharmaceutically acceptable salt thereof and the process for their preparation.